

IN THE CLAIMS:

Please cancel Claims 2, 4, and 14-17, without prejudice or disclaimer of subject matter.

Please amend Claims 1, 5, 11, 12, and 18-21, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claim 1 (currently amended): A coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface, comprising:

calculation means for calculating the position coordinates of the coordinate input pointing tool;

change means for changing the position coordinates ~~on the basis of predetermined coordinates~~ by multiplying the position coordinates by a predetermined coefficient that is obtained on the basis of a coordinate with a vertical direction axis with respect to the coordinate input surface, and that is related to a distance between the coordinate input surface and the coordinate input pointing tool; and

output means for outputting the position coordinates changed by said change means.

Claim 2 (canceled).

Claim 3 (original): The apparatus according to claim 1, further comprising interpolation means for interpolating the position coordinates changed by said change means.

Claim 4 (canceled).

Claim 5 (currently amended): A coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface on which an X-Y plane and a Z-axis with respect to the X-Y plane are defined, comprising:

calculation means for calculating the position coordinates (X, Y, Z) of the coordinate input pointing tool;

determination means for determining an operative state of a predetermined switch of the coordinate input pointing tool;

comparison means for comparing a predetermined value with a Z-coordinate value of the position coordinates (X, Y, Z) ~~coordinate values~~ calculated by said calculation means, on the basis of a determination result of said determination means; and

control means for controlling output of the position coordinates (X, Y, Z) calculated by said calculation means, on the basis of the determination result of said determination means or the determination result of said determination means and a comparison result of said comparison means.

Claim 6 (original): The apparatus according to claim 5, wherein said control means determines a coordinate output form of the position coordinates (X, Y, Z) calculated by said calculation means, on the basis of the determination result of said determination means or the determination result of said determination means and the comparison result of said comparison means.

Claim 7 (original): The apparatus according to claim 6, wherein the coordinate output form includes

a first coordinate output form in which at least (X, Y) coordinate values of the position coordinates (X, Y, Z) calculated by said calculation means are output, and

a second coordinate output form in which differential coordinate values (X, Y, Z) as differences between predetermined position coordinates calculated by said calculation means and position coordinates (X, Y, Z) calculated by said calculation means later as the coordinate input pointing tool moves are output.

Claim 8 (original): The apparatus according to claim 5, wherein said control means determines a presence/absence of the output of the position coordinates on the basis of the determination result of said determination means or the determination result of said determination means and the comparison result of said comparison means.

Claim 9 (original): The apparatus according to claim 5, wherein when the determination result of said determination means indicates that the predetermined switch is

in the operative state, said control means outputs at least (X, Y) coordinate values of the position coordinates (X, Y, Z) calculated by said calculation means.

Claim 10 (original): The apparatus according to claim 5, wherein when the determination result of said determination means indicates that the predetermined switch is not in the operative state, and the comparison result of said comparison means indicates that the Z-coordinate value is not more than the predetermined value, said control means outputs at least (X, Y) coordinate values of the position coordinates (X, Y, Z) calculated by said calculation means.

Claim 11 (currently amended): The apparatus according to claim 5, wherein  
the apparatus further comprises  
storage means for storing the predetermined position coordinates (X, Y, Z) calculated by said calculation means as first position coordinates, and  
difference calculation means for calculating differences between the first position coordinates ~~coordinate values~~ (X, Y, Z) stored in said storage means and position coordinates (X, Y, Z) calculated by said calculation means later as the coordinate input pointing tool moves, and

when the determination result of said determination means indicates that the predetermined switch is not in the operative state, and the comparison result of said comparison means indicates that the Z-coordinate value is not less than the predetermined value, said control means outputs ~~the~~ differential coordinate values (X, Y, Z) obtained by said difference calculation means.

Claim 12 (currently amended): The apparatus according to claim 11,  
wherein

the apparatus further comprises continuous input state determination means for determining on the basis of a coordinate calculation sampling rate of said calculation means whether input by the coordinate input pointing tool is in a continuous input state, and

the predetermined position coordinates are first coordinate values of effective coordinate values during the continuous input state based on a the determination result of said continuous input state determination means.

Claim 13 (original): The apparatus according to claim 5, wherein when the determination result of said determination means indicates that the predetermined switch is in the operative state, and the comparison result of said comparison means indicates that the coordinate value equals the predetermined value, said control means does not output the position coordinates (X, Y, Z) calculated by said calculation means.

Claims 14-17 (canceled).

Claim 18 (currently amended): A control method of a coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface, comprising:

a calculation step of calculating the position coordinates of the coordinate input pointing tool;

a change step of changing the position coordinates ~~on the basis of predetermined coordinates~~ by multiplying the position coordinates by a predetermined coefficient that is obtained on the basis of a coordinate with a vertical direction axis with respect to the coordinate input surface, and that is related to a distance between the coordinate input surface and the coordinate input pointing tool; and

an input step of inputting the position coordinates changed in said the change step.

Claim 19 (currently amended): A control method of a coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface on which an X-Y plane and a Z-axis with respect to the X-Y plane are defined, comprising:

a calculation step of calculating the position coordinates (X,Y,Z) of the coordinate input pointing tool;

a determination step of determining an operative state of a predetermined switch of the coordinate input pointing tool;

a comparison step of comparing a predetermined value with a Z-coordinate value of the position coordinates (X,Y,Z) ~~coordinate values~~ calculated in said the calculation step, on the basis of a determination result in said the determination step; and

a control step of controlling output of the position coordinates (X,Y,Z) calculated in said the calculation step, on the basis of the determination result in

said the determination step or the determination result in said the determination step and a comparison result in said the comparison step.

Claim 20 (currently amended): A program which causes a computer to control a coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface, comprising:

[[a]] program code for a calculation step of calculating the position coordinates of the coordinate input pointing tool;

[[a]] program code for a change step of changing the position coordinates ~~on the basis of predetermined coordinates~~ by multiplying the position coordinates by a predetermined coefficient that is obtained on the basis of a coordinate with a vertical direction axis with respect to the coordinate input surface, and that is related to a distance between the coordinate input surface and the coordinate input pointing tool; and

[[a]] program code for an output step of outputting the position coordinates changed in the change step.

Claim 21 (currently amended) A program which causes a computer to control a coordinate input apparatus which calculates position coordinates of a coordinate input pointing tool with respect to a coordinate input surface on which an X-Y plane and a Z-axis with respect to the X-Y plane are defined, comprising:

[[a]] program code for a calculation step of calculating the position coordinates (X,Y,Z) of the coordinate input pointing tool;

[[a]] program code for a determination step of determining an operative state of a predetermined switch of the coordinate input pointing tool;

[[a]] program code for a comparison step of comparing a predetermined value with a Z-coordinate value of the position coordinates (X,Y,Z) ~~coordinate values~~ calculated in the calculation step, on the basis of a determination result in the determination step; and

[[a]] program code for a control step of controlling output of the position coordinates (X,Y,Z) calculated in the calculation step, on the basis of the determination result in the determination step or the determination result in the determination step and a comparison result in the comparison step.